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APPROACHES OF IT MANAGEMENT. THE CHOICE OF BETTER ONE

Abstract: Today, organizations operate in a highly complex and competitive business environment and need to react quickly and with flexibility to rapidly changing market conditions. To maintain a competitive market position, organizations need to implement methods that enable rapid changes to business processes and at the same time, ensure the achievement of business goals and objectives. Organizational business processes are supported by Information Technology (IT) which has become an integral part of business. Clearly defined governance and management practices help organizations to align IT with business and to balance IT costs and benefits. IT governance is a subset of corporate governance that focuses mainly on performance and risk management. IT governance helps to ensure that IT delivers the anticipated business value while minimizing related costs and risks. Due to increasing dependence of business on IT and increasing volumes of information required to support business processes, the implementation of IT governance and management framework is essential for effective functioning of an organization. This paper discusses two frameworks for the management of an enterprise IT: Information Technology Infrastructure Library (ITIL) and Control Objectives for Information and Related Technology (COBIT), with the objective to identify the relationships between these frameworks. As a result of this analysis, it is suggested whether it is better to use one of the compared approaches or a combination of them.

Keywords: IT framework, maturity model, incident management, ITIL, COBIT, ITSM, IT Governance, IT Performance Management.

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ПОДХОДЫ К УПРАВЛЕНИЮ ИТ. КАКОЙ ЛУЧШЕ?

Аннотация: Сегодня организации работают в очень сложной и конкурентной бизнес-среде и должны быстро и гибко реагировать на быстро меняющиеся рыночные условия. Для сохранения конкурентных позиций на рынке организациям необходимо внедрять методы, позволяющие оперативно изменять бизнес-процессы и в то же время обеспечивать достижение бизнес-целей и задач. Организационные бизнес-процессы поддерживаются информационными технологиями, которые стали неотъемлемой частью бизнеса. Четко определенные методы руководства и управления помогают организациям связывать ИТ с бизнесом и сбалансировать затраты и выгоды от ИТ. Управление ИТ является подмножеством корпоративного управления, которое фокусируется в основном на управлении эффективностью и рисками/ Управление ИТ помогает гарантировать, что оно обеспечивает ожидаемую бизнес-ценность при минимизации связанных с этим затрат и рисков В связи с растущей зависимостью бизнеса от ИТ и увеличением объемов информации, необходимой для поддержки бизнес-процессов, внедрение системы управления ИТ имеет важное значение для эффективного функционирования организации. В данном документе рассматриваются два подхода управления ИТ предприятия: библиотека инфраструктуры информационных технологий (ITIL) и цели управления для информационных и связанных с ними технологий (COBIT), с целью выявления связей между этими структурами. В результате этого анализа я выявляю, лучше использовать один из сравниваемых подходов или их комбинацию.

Ключевые слова: IT framework, модель зрелости, управление инцидентами, ITIL, COBIT, ITSM, управление информационными технологиями, управление ИТ-производительностью.

Information Technology (IT) has become crucial to the support, sustainability and growth of most businesses, by supporting existing as well as new business strategies. IT has ceased to act simply as a supportive role and has taken the central position within organizations. Currently, having an IT department is not enough to ensure that an organization is technologically successful.

Information technology management systems of enterprises and organizations are quite complex, since it is necessary to take into account the interests of many participants involved in the creation and use of resources (sponsors of the information system, end users and developers).

Currently, IT service has become an integral part of any business, acting as a provider of certain services for business units; and the relationship between them is formalized as a «service provider-service consumer». The business unit sets its requirements for the range of services and their quality, the company management determines the amount of funding to meet these requirements; and IT departments maintain and develop the information infrastructure of the enterprise, so that it is able to provide the requested quality service. Now there are various IT management practices that help organizations to build management.

Therefore, the purpose of this work is to determine which approach of IT management is better.

Research questions:

- to select the structures of IT governance;
- to compare selected management structures;
- to select one of the structures.

Among the existing standards in the field of IT management the most well-known and commonly used are the following:

- ITIL (Information Technology Infrastructure Library);
- COBIT (Control Objectives for Information and related Technology).

IT Infrastructure Library

ITIL, or IT Infrastructure Library, is the core approach to IT service management in an IT Service Management (ITSM) organization. The ITIL library details and systemically outlines the processes that improve the quality of IT services and improve their focus on the needs of the business, that is, the organization in which the IT Department operates. ITIL library

was formed in the early 1990s by the order of the British Government, over the years of its existence ITIL version has been updated several times.

ITIL library contains a detailed description of the most important activities in the IT work, as well as a complete list of responsibilities, tasks, procedures, process descriptions and lists of actions that can be adapted by any organization. These descriptions are often used to define goals for improving IT organizations and IT departments.

The article [2] describes that ITIL is organized in the following main service components:

1. Service Strategy focuses on mirroring the overall IT Service Delivery model in a manner that perfectly matches and covers the organization structure and inherent needs while establishing processes that enable monitoring and updating the configuration items.

2. Service Design is not merely an initial activity that searches for design the IT services in a manner that will match the organizational structure but a continuous assessment, aiming at having a set of IT and service processes that are designed to best fit corporate needs.

3. Service Transition defines and mitigates change risk through proper Change Management and Planning.

4. Service Operation assures daily operations by delivering the needed current recursive support tasks such as Service Desk or Backups among other.

5. Continuous Service Improvement considers established KPIs and their evolution as well as Problems and bottlenecks and performs needed analysis that will lead to the formulation of Optimization proposals.

COBIT approach

COBIT [1] as a framework for IT governance and management is based on a set of best practices. COBIT helps organizations to create value from IT by maximizing the benefits and minimizing the risks associated with IT, ensuring that IT meets the legislative and regulatory requirements and achieves alignment of IT strategy with business goals. The current version of COBIT 5 published in 2012 integrates frameworks created by International Association of Information Systems Audit and Control Association as Val IT 2.0, Risk IT, the IT Assurance Framework and the Business Model for Information Security with a version of COBIT 4.1. COBIT 5 is developed with reference to the widely accepted standards and frameworks for IT Governance such as ITIL, PRINCE2, Capability Maturity Model Integration and The Open Group Architecture Framework. These frameworks overlap in many areas but there are also significant

differences in their approaches. Each framework provides guidance about tools for IT Governance but brings different value to organizations. COBIT 5 is composed of the business framework for governance and management of enterprise IT and other complementary publications, giving guidance about practical implementation of governance and management of enterprise IT. COBIT defines the Process Reference Model and Information Model and gives instructions about the application of COBIT in the area of information security, audit and risk management, and helps to evaluate governance processes in the IT enterprise. COBIT is applicable to businesses of all sizes and industry sectors because it is independent on a specific enterprise IT architecture. COBIT helps to:

- ensure information quality needed to support business decisions;
- achieve strategic objectives and efficient and innovative use of IT;
- achieve operational excellence deploying reliable and efficient technologies;
- manage IT risk at an acceptable level;
- optimize costs of IT services and technologies;
- achieve compliance with legislation, agreements and policies.

Using COBIT allows the IT Manager to transform the goals and objectives of the company as a whole into clear and understandable IT development plans. COBIT distinguishes the complexity of the approach, as well as the presence of clear practical recommendations with which it is possible to create an effective information technology management system in the company including a risk management system in it. The COBIT methodology describes in detail the business-oriented approach to the creation of the information environment in the company (goals and principles of management, management objects are given, all IT processes are clearly defined (for each of them «inputs» and «outputs», executors and responsible persons, control objects and metrics are specified). Within the framework of this approach, information technologies are considered as a business tool.

The article [4] compares the two approaches we consider. A brief comparison is presented in Table.

Table – Comparative table of approaches and standards

	ITIL	COBIT
What's it?	A set of best practices for IT service management.	Integration of business structure and IT structure for enterprise management.

How is it visible in the market?	ITIL has a focus on internal IT processes. The latest versions have included a service life cycle and more attention is paid to cost and customers.	COBIT comes from a history of auditing and compliance. The latest version has moved towards managing IT services, IT risks, etc.
What is it mainly used for?	Help to define IT service management operational processes.	Define audit and compliance requirements for it.
Who is it for?	Any organization that provides internal or external IT services. It is most commonly used in operational IT departments.	Internal IT organizations of large enterprises. COBIT is often used by strategic groups and people responsible for audit compliance.

The benefits of COBIT in comparison with ITIL (as the core of ITSM):

1. Complexity at the company level. The concept of «organization-wide information technology governance» in COBIT versus narrow IT service management within ITIL.

2. Coverage. ITIL V3 2007 describes only 8 of the 34 processes outlined in COBIT 4.1.

3. Affordability. COBIT is incomparably cheaper than ITIL.

4. Growing relevance. The market still underestimates COBIT but already «ate» ITIL.

5. Communication with the company's strategy. The term «Governance» (governance, top-level governance related to strategic vision) appears only in ITIL Service Strategy while in COBIT this concept has become the basis for the methodology.

Among the undeniable advantages of ITIL are the following:

- ITIL is a source of ideas and opinions, provides food for thought;
- ITSM methodology undoubtedly has a promoted brand, ITIL has a large number of readers and users around the world;
- ITIL provides for a comprehensive system of certification of specialists;
- availability of software certification system.

When comparing COBIT and ITIL, quite a few overlaps are noticed. Both of these frameworks attempt to situate IT within the larger company

as a service-oriented and autonomous entity. This allows IT departments guide their own policies and practices and build their own roadmaps with business directives in mind, rather than forcing the department to bend to the whims of the rest of the company.

In this article, the concepts of ITIL and COBIT were defined and compared with each other. In conclusion, we can say that the distinction between them can be described as «COBIT provides the «why»; ITIL provides the «how». It is more accurate to state that enterprises and IT professionals who need to address business needs in the ITSM area would be well served to consider using both COBIT and ITIL guidance. Leveraging the strengths of both frameworks and adapting them for their use as appropriate will solve business problems and support business goals achievement.

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